

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1 Claim 1. (*Currently Amended*) A method for stretching and mounting a screen
2 printing screen, comprising:

3 providing an outer frame with two ends generally perpendicular to a print
4 direction;

5 providing an inner frame with two print direction sides generally parallel to the
6 print direction;

7 providing a screen/mesh with two print direction sides and two ends, the print
8 direction sides being generally parallel to the print direction and the ends being generally
9 perpendicular to the print direction;

10 clamping an end of the screen/mesh ~~in a print direction;~~

11 applying significant tension forces to the screen/mesh in the print direction to
12 produce a stretched screen/mesh;

13 moving the ends of the outer frame to contact the stretched screen/mesh;

14 attaching the stretched screen/mesh to the ends of the outer frame ~~in the print~~
15 direction;

16 trimming excess screen/mesh ~~[[in]]~~ along the print direction;

17 moving the inner frame to contact the screen/mesh;

18 attaching the screen/mesh to the print direction sides of the inner frame ~~in the~~
19 ~~print direction~~; and
20 providing imaging/printing on the screen/mesh.

1 Claim 2. (*Previously Presented*) The method according to claim 1, further
2 comprising applying tension forces to the screen/mesh in a direction perpendicular to the
3 print direction that are lower than the applied significant forces in the print direction.

1 Claim 3. (*Previously Presented*) The method according to claim 1, further
2 comprising applying small lateral forces to the screen/mesh perpendicular to the print
3 direction prior to clamping or stretching the screen/mesh to ensure the screen/mesh is flat,
4 with no significant non-uniformities/wrinkles.

1 Claim 4. (*Currently Amended*) The method according to claim 1, wherein the
2 clamping step further comprises:
3 positioning the outer frame; and
4 clamping the end of the screen/mesh to an end of the outer frame.

1 Claim 5. (*Currently Amended*) The method according to claim 1, wherein the
2 ~~stretching~~ providing a screen/mesh step further comprises:

3 applying a strip of material to each print direction side of the screen/mesh to
4 provide a seal against fluid encroachment in a bond between the screen/mesh and the
5 inner frame.

1 Claim 6. (*Previously Presented*) The method according to claim 1, wherein the
2 attaching step further comprises attaching the screen/mesh to the inner frame by using
3 spray adhesive, adhesive glue, or double sided self-adhesive tape.

1 Claim 7. (*Previously Presented*) The method according to claim 1, wherein the
2 providing an inner frame step further comprises providing the inner frame in a fixed
3 format.

1 Claim 8. (*Currently Amended*) The method according to claim 1, wherein the
2 providing an inner frame step further comprise:

3 providing the inner frame in a multi-piece format with plural pieces and
4 connection pieces; and

5 applying lateral tension forces to the screen/mesh in a direction perpendicular to
6 the print direction through lateral fixed displacements of movements of the piece
7 movements plural pieces or the connection pieces of the multi-piece inner frame relative
8 to each other.

1 Claim 9. (*Previously Presented*) The method according to claim 1, wherein the
2 clamping an end of the screen/mesh step further comprises clamping one of the two ends
3 of the screen/mesh before stretching and clamping the other of the two ends.

1 Claim 10. (*Previously Presented*) The method according to claim 1, wherein the
2 providing an inner frame step further comprises attaching ink/fluid barriers to the inner
3 frame.

1 Claim 11. (*Previously Presented*) The method according to claim 10, wherein the
2 attaching ink/fluid barriers to the inner frame step further comprises attaching using hook

3 and loop fasteners, spray adhesive, liquid adhesive, self adhesive double sided tape,
4 mechanical locking elements, or single sided adhesive tape.

1 Claim 12. (*Previously Presented*) The method according to claim 1, wherein the
2 providing a screen/mesh step further comprises providing the screen/mesh as one or more
3 screens/meshes on a roll.

1 Claim 13. (*Previously Presented*) The method according to claim 12, wherein the
2 providing a screen/mesh step further comprises:

3 applying a strip of material to each print direction side of the one or more
4 screens/meshes to provide an attachment point, support, and a seal against fluid
5 encroachment in a bond between the one or more screens/meshes and the inner frame.

1 Claim 14. (*Previously Presented*) The method according to claim 12, wherein the
2 providing a screen/mesh step further comprises separating individual screen/mesh pieces
3 from the one or more screens/meshes for shipping and storage, and providing the
4 separated individual screen/mesh pieces with a protective material.

1 Claim 15. (*Previously Presented*) The method according to claim 14, wherein the
2 providing a screen/mesh step further comprises:

3 applying a strip of material to each print direction side of the separated individual
4 screen/mesh pieces to provide an attachment point, support, and a seal against fluid
5 encroachment in a bond between the separated individual screen/mesh pieces and the
6 inner frame.

1 Claim 16. (*Previously Presented*) The method according to claim 1, wherein the
2 providing a screen/mesh step further comprises providing the screen/mesh as individual
3 pre-cut pieces that are edge sealed to ensure dimensional stability and integrity.

1 Claim 17. (*Previously Presented*) The method according to claim 16, wherein the
2 providing a screen/mesh step further comprises:

3 applying a strip of material to each print direction side of the individual pre-cut
4 pieces to provide an attachment point, support, and a seal against fluid encroachment in a
5 bond between the individual pre-cut pieces and the inner frame.

1 Claim 18. (*Currently Amended*) An apparatus for stretching and mounting a
2 screen printing screen, the apparatus comprising:

3 an inner frame with ~~a support barrier mechanism for ink/fluid retention for~~
4 ~~controlled transfer during a printing period to a screen/mesh with two print direction~~
5 ~~sides and two ends~~ two print direction sides for attaching to print direction sides of a
6 screen/mesh, said sides of said inner frame being positionable generally parallel to a print
7 direction; and

8 an outer frame ~~configured for placing~~ with two ends for attaching to ends of a
9 screen mesh, said ends of said outer frame being positionable generally perpendicular to
10 the print direction, said outer frame being placeable outside the inner frame,

11 wherein the inner and outer frames do not connect, support, or constrain each
12 other to provide tension ~~and ink barrier functions,~~ and enable application of significant
13 tension forces ~~are applied~~ to the screen/mesh in ~~[[a]]~~ the print direction.

1 Claim 19. (*Currently Amended*) The apparatus according to claim 18, wherein the
2 ~~apparatus is configured to~~ two print direction sides of the inner frame can apply tension
3 forces to the screen/mesh in a direction perpendicular to the print direction that are lower
4 than ~~[[the]]~~ applied significant forces in the print direction.

1 Claim 20. (*Currently Amended*) The apparatus according to claim 18, wherein the
2 apparatus ~~is configured to~~ can apply small lateral forces to the screen/mesh perpendicular
3 to the print direction prior to clamping or stretching the screen/mesh to ensure the
4 screen/mesh is flat, with no significant non-uniformities/wrinkles.

1 Claim 21. (*Previously Presented*) The apparatus according to claim 18, further
2 comprising a positioning device configured to position the outer frame, and clamp
3 elements configured to clamp the screen/mesh to the outer frame after the outer frame is
4 positioned.

 Claim 22. (*Canceled*)

1 Claim 23. (*Previously Presented*) The apparatus according to claim 18, further
2 comprising attachment means for attaching the screen/mesh to the inner frame by using
3 spray adhesive, adhesive glue, or double sided self-adhesive tape.

1 Claim 24. (*Previously Presented*) The apparatus according to claim 18, wherein
2 the inner frame is configured in a fixed format.

1 Claim 25. (*Currently Amended*) The apparatus according to claim 18, wherein the
2 inner frame is configured in a multi-piece format with plural pieces and connection
3 pieces, and is configured ~~for applying~~ to apply lateral tension forces in a direction
4 perpendicular to the print direction to the screen/mesh through lateral fixed displacements
5 of movements of the plural pieces or the connection pieces of the multi-piece inner frame
6 relative to each other.

1 Claim 26. (*Currently Amended*) The apparatus according to claim 18, further
2 ~~comprises~~ comprising clamping means for clamping one of the two ends of the
3 screen/mesh before stretching and clamping the other of the two ends.

1 Claim 27. (*Currently Amended*) The apparatus according to claim 18, further
2 comprising ink/fluid barriers attached to the inner frame, said ink/fluid barriers providing
3 ink/fluid retention for controlled transfer of ink during a printing period to a screen/mesh
4 with two print direction sides and two ends, the print direction sides being generally
5 parallel to a print direction and the ends being generally perpendicular to the print
6 direction.

1 Claim 28. (*Currently Amended*) The apparatus according to claim 18, wherein the
2 ink/fluid barriers are attached to the inner frame using hook and loop fasteners, spray
3 adhesive, liquid adhesive, self adhesive double sided tape, mechanical locking elements,
4 or single sided adhesive tape.

1 Claim 29. (*Currently Amended*) The apparatus according to claim 18, ~~wherein the~~
2 in combination with a screen/mesh [[is]] configured as one or more screens/meshes on a
3 roll, the screen/mesh having two print direction sides and two ends, the print direction
4 sides being generally parallel to the print direction and the ends being generally
5 perpendicular to the print direction.

1 Claim 30. (*Currently Amended*) The apparatus according to claim 29, wherein the
2 one or more screens/meshes [[is]] are configured with a strip of material on each print
3 direction side of the one or more screens/meshes to provide an attachment point, support,
4 and a seal against fluid encroachment in a bond between the one or more screens/meshes
5 and the inner frame.

1 Claim 31. (*Previously Presented*) The apparatus according to claim 29, wherein
2 the screen/mesh is configured as a separate individual screen/mesh piece with a
3 protective material for shipping and storage.

1 Claim 32. (*Previously Presented*) The apparatus according to claim 31, wherein
2 the separate individual screen/mesh includes a strip of material on each print direction
3 side to provide an attachment point, support, and a seal against fluid encroachment in a
4 bond between the separated individual screen/mesh pieces and the inner frame.

1 Claim 33. (*Currently Amended*) The apparatus according to claim 18, ~~wherein the~~
2 in combination with a screen/mesh [[is]] configured as individual pre-cut pieces that are
3 edge sealed to ensure dimensional stability and integrity, the screen/mesh having two
4 print direction sides and two ends, the print direction sides being generally parallel to the
5 print direction and the ends being generally perpendicular to the print direction.

1 Claim 34. (*Previously Presented*) The apparatus according to claim 33, wherein
2 the pre-cut pieces each include a strip of material on each print direction side to provide
3 an attachment point, support, and a seal against fluid encroachment in a bond between the
4 individual pre-cut pieces and the inner frame.

Claims 35-50 (*Canceled*)